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Attorney Docket No.: 2543-1-044PCT/US

IN THE CLAIMS

Please amend the Claims as follows:

- 1. (original) A method of screening or testing for candidate anti-fungal compounds that impair 1-phosphotidylinositol-4-phosphate 5-kinase enzyme (MSS4) function, comprising:
- a) providing fungal MSS4;
- b) providing one or more candidate compounds;
- c) contacting said MSS4 with said one or more candidate compounds; and
- d) determining the interaction of the candidate compound with said MSS4.
- 2. (original) A method according to claim 1 wherein the MSS4 comprises a fragment, a function-conservative variant, an active fragment or a fusion protein of MSS4.
- 3. (currently amended) A method according to any one of claim[[s]] 1 or 2, wherein the fungal MSS4 is from fungus of *Candida* or *Aspergillus* species.
- 4. (original) A modified eukaryotic cell(s) wherein the cell(s) expresses fungal MSS4 under the control of a heterologous promoter.
- 5. (original) The cell according to claim 4 which is a *C. albicans* cell.
- 6. (currently amended) The cell according to any one of claim[[s]] 4 or 5, wherein the MSS4 is homologous.
- 7. (currently amended) The cell according to any one of claim[[s]] 4 to 5, wherein the MSS4 comprises a fragment, a function-conservative variant, an active fragment or a fusion protein of MSS4.

Attorney Docket No.: 2543-1-044PCT/US

8. (currently amended) A method of screening or testing for candidate anti-fungal compounds that impair 1-phosphotidylinositol-4-phosphate 5-kinase enzyme (MSS4) function, comprising:

- a) providing fungal MSS4 in a eukaryotic cell(s) as defined in any one of claim[[s]] 4 to 7;
- b) providing one or more candidate compounds;
- c) contacting said eukaryotic cell(s) with said one or more candidate compounds; and
- d) determining the interaction of the candidate compound with said MSS4 by assessing the effect on growth or viability of said cells.
- 9. (currently amended) A compound identified by the method of claim[[s]] 1, 2, 3 or 8, which impairs MSS4 function for use as an antifungal compound.
- 10. (original) A pharmaceutical composition comprising a MSS4 inhibitor and a pharmaceutically acceptable carrier.
- 11. (original) Candida or Aspergillus MSS4 as a specific target for antifungal compounds.
- 12. (canceled)
- 13. (canceled)
- 14. (currently amended) The <u>use method</u> according to claim <u>18</u> 12 or 13 wherein the fungal infection is a topical, mucosal or systemic fungal infection.
- 15. (currently amended) The <u>use method</u> according to claim 14 wherein the topical or mucosal fungal infection is caused by species of *Candida* or the systemic fungal infection is caused by species of *Candida* or *Aspergillus*.

Attorney Docket No.: 2543-1-044PCT/US

16. (currently amended) The <u>use method</u> according to <u>any one of claim[[s]] 18 12 to 15</u> wherein said compound impairs fungal MSS4 function to a greater extent than host MSS4 function.

17. (new) A compound identified by the method of claim 8, which impairs MSS4 function for use as an antifungal compound.

18. (new) A method for the treatment or prevention of fungal infections in a host, which comprises administering to the host a therapeutically or prophylactically effective amount of a MSS4 inhibitor.

19. (new) A method for the treatment or prevention of fungal infections in a subject who is immunosuppressed, which comprises the step of administering to the subject a therapeurtically or prophylactically effective amount of a MSS4 inhibitor.

20. (new) The method according to claim 19 wherein the fungal infection is a topical, mucosal or systemic fungal infection.

21. (new) The method according to claim 19 wherein the topical or mucosal fungal infection is caused by species of *Candida* or the systemic fungal infection is caused by species of *Candida* or *Aspergillus*.

22. (new) The method according to claim 19 wherein said compound impairs fungal MSS4 function to a greater extent than host MSS4 function.